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**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Adopt Rules  
and Procedures Governing Commission-  
Regulated Natural Gas Pipelines and Facilities  
to Reduce Natural Gas Leakage Consistent  
With Senate Bill 1371.

R.15-01-008  
(Filed January 15, 2015)

**PACIFIC GAS AND ELECTRIC COMPANY'S INITIAL COMMENTS  
ON ADMINISTRATIVE LAW JUDGE'S RULING ENTERING STAFF  
WORKSHOP SUMMARY AND WORKSHOP MATERIALS ON  
TARGETS, COMPLIANCE, AND ENFORCEMENT INTO THE  
RECORD AND SEEKING COMMENTS**

LISE H. JORDAN  
JONATHAN D. PENDLETON

Attorneys for  
PACIFIC GAS AND ELECTRIC COMPANY  
Law Department  
77 Beale Street, B30A  
San Francisco, CA 94105  
Telephone: (415) 973-2916  
Facsimile: (415) 973-5520  
E-Mail: [Jonathan.Pendleton@pge.com](mailto:Jonathan.Pendleton@pge.com)

Dated: July 15, 2016

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**I. INTRODUCTION**

Pursuant to Administrative Law Judge (ALJ) Kersten's Ruling Entering Staff Workshop Summary and Workshop Materials on Targets, Compliance, and Enforcement into the Record and Seeking Comments (Ruling), issued on June 23, 2016, Pacific Gas and Electric Company (PG&E) respectfully submits the following initial comments.

**II. DISCUSSION**

**1. What suggested edits, clarifications, and comments do you have in response to the summary?**

PG&E suggests clarifying the following two statements in the Staff Workshop Report<sup>1</sup> summarizing PG&E's April 12, 2016 presentation on Targets, Compliance and Enforcement:

- "Also, PG&E complained that there was a proposed three-year leak survey cycle which was not approved by the CPUC. In the last General Rate Case, PG&E stated that it proposed a four-year leak survey cycle but the Office of Ratepayer

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<sup>1</sup> Ruling at Attachment 1.

Advocates (ORA) has proposed a five-year cycle.”<sup>2</sup> PG&E proposed a 3-year leak survey cycle in the 2014 GRC rate case, but received funding equivalent to a 5-year leak survey cycle. PG&E was given the opportunity to accelerate its leak survey cycle but no additional funding would be provided. PG&E proposed a 4-year leak survey cycle in the 2017 GRC and in ORA’s reply testimony it recommended staying on a 5-year leak survey cycle and that the Leak Abatement OIR should decide the change in cycle. As PG&E summarized in its Best Practices Comments: “PG&E supports the adoption of a three-year leak survey cycle. PG&E proposed a three-year cycle in its 2014 GRC. In its 2017 GRC, PG&E requests funding to perform leak survey on a four-year cycle. That case is currently in litigation, with parties recommending between three and five-year cycles. If PG&E receives funding and is provided adequate time to ramp up its field resources, PG&E would fully support the movement to a three-year survey cycle....”<sup>3</sup>

- “PG&E stated that it prefers a voluntary program and that some BPs are premature, but after a few years they could be solidified.”<sup>4</sup> PG&E stated at the workshop that there should be flexibility to select Best Practices, similar to the Environmental Protection Agency’s (EPA) voluntary methane challenge program.

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<sup>2</sup> Staff Workshop Report at 16.

<sup>3</sup> Pacific Gas and Electric Company’s Comments on Administrative Law Judge’s Ruling Entering Summary of Best Practices Working Group Activities and Staff Recommendations Into the Record and Seeking Comments at 16.

<sup>4</sup> Staff Workshop Report at 17.

2. **Explain your position on CARB’s statement at the workshop that a 40% reduction in 2015 emissions by 2025 is a reasonable target.<sup>5</sup> If such a target (whether it is this one or similar) is established in the foreseeable future, should it be set:**
- a. **Against a company's total baseline reported emissions profile, allowing it to meet an aggregated reduction target?**
  - b. **For specific functional components (i.e. emission source/equipment type) of the gas system operated by each individual company?**
  - c. **On an industry-wide basis using information on potential emission reductions, emissions impact, costs by functional component, such that the total industry achieves a 40% reduction even though specific targets for each company may vary?**

PG&E understands this question refers to the statement made by ARB and included in its Proposed Short Lived Climate Pollutant (SLCP) Reduction Strategy that: “California can match the goals of the Obama Administration to reduce methane emissions from the oil and gas sector by 40-45 percent by 2025... and to reduce fugitive methane emissions from all sources by similar levels by 2030.”<sup>6</sup>

PG&E’s overall position is that greenhouse gas reduction (GHG) targets, including the sub-pollutant target proposed by ARB, must be transparent, based on sound analytics, and backed by mitigation measures that are technically feasible and cost-effective. Additionally, because this is both a pollutant and sector-based target, it should be compared to reductions across other sectors. Further, an appropriate baseline must be established first to make certain meaningful targets are set.

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<sup>5</sup> The 40% reduction target is consistent with the SLCP goals, the federal methane reduction goals, and the Governor’s 2030 target. As a starting point, ARB staff examined if these goals were realistic with the available data and concluded they were realistic and in line with achieving the maximum technologically feasible and cost effective reductions as required in SB 1371.

<sup>6</sup> Air Resources Board, [Proposed SLCP Reduction Strategy](#), April 2016, at 64.

PG&E supports setting a target as part of this proceeding to guide utilities in developing their Compliance Plans;<sup>7</sup> however, at this time, PG&E has not seen sufficient justification that a 40 percent reduction of 2015 emissions by 2025 is feasible. ARB's target would require utilities to reduce emissions by an average of 4 percent per year and is more aggressive than targets for other sectors and pollutants. As stated in PG&E's comments on ARB's SLCP,<sup>8</sup> it appears that ARB based its target on the U.S Environmental Protection Agency's (U.S. EPA) proposed Climate, Air Quality, Permitting Rules (Federal Rules). While the Federal Rules for the oil and natural gas do address fugitive methane emissions, that in and of itself is not a sufficient justification to adopt that target for California natural gas utilities. The Federal Rules would not cover the same sources as California and did not contemplate mitigation measures to address these emissions. Moreover, California utilities have already undergone aggressive leak reduction programs, in contrast to other states. Finally, fundamental questions about that proceeding (e.g., how the target was established, based on what year, at what cost, etc.) have not been established on the record in this proceeding.

For example, ARB's hypothetical Compliance Plan<sup>9</sup> shows dramatic decreases across all source categories, including a 90 percent reduction in leaks from customer meters, an 80 percent decrease in blowdowns, and a 60 percent decrease in pipeline leaks, among others. While these

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<sup>7</sup> See Comments of Pacific Gas and Electric Company on Cost-Effectiveness Scoping Memo Questions at 2-5. PG&E endorsed "Option 2," which it described as follows: "For Option 2, as contemplated by the Scoping Memo and by the planned CPUC/ARB Workshop on targets, the Commission and ARB would work with stakeholders to establish a target or targets for methane reductions. Once targets have been set, utilities would propose a portfolio of measures, similar to the best practices identified within the EPA's Methane Challenge Program, which would meet the overall target. In this context, the measures would be cost-effective if Operators achieved the target while keeping within reasonable overall program costs and allowing the flexibility for each Operator to identify work that is appropriate for its system." *Id.* at 3.

<sup>8</sup> See Pacific Gas and Electric Company's Comments on the Air Resources Board Proposed Short-Lived Climate Pollutant Reduction Strategy, May 20, 2016 (<http://www.arb.ca.gov/lists/com-attach/23-slcpl2016-AHBQMVUxWFQLbgNs.pdf>).

<sup>9</sup> April 12, 2016 Workshop on Methane Emissions and Leak Abatement Targets, Compliance and Enforcement, ARB Presentation, Slide 19, "An Example of Compliance Plan."

reductions may well be possible, it is unclear at this time what total portfolio of technologies and practices would be necessary for such dramatic reductions and at what cost.

As stated previously, PG&E believes that flexible, operator-specific Compliance Plans, guided by a technically feasible and transparent target, will allow operators to achieve the greatest reductions in an affordable manner.<sup>10</sup> The Commission and ARB should work with all stakeholders to establish such a target in this proceeding.

**3. How could the proposed CARB target be coordinated with other emission targets and state policy (e.g., Governor's Executive Order B-30-15 for a 40% reduction below 1990 levels by 2030, CARB's Short-Lived Climate Pollutant (SLCP) Plan for a 40-45% GHG reduction levels by 2025)?**

The scientific consensus, expressed by the Intergovernmental Panel on Climate Change, is that global warming should be limited to below 2 degrees Celsius to significantly reduce the risks and impacts of climate change. The targets established in Assembly Bill 32 (20 percent below 1990 levels by 2020), Executive Order B-30-15 (40 percent below 1990 levels by 2030), and Executive Order S-3-05 (80 percent below 1990 levels by 2050) establish economy-wide reduction targets for California and ensure proportional progress towards this goal. The targets in the SLCP establish sub-pollutant targets for methane, black carbon, and fluorinated gases. Because these pollutants are in the atmosphere for a relatively short time, but trap greater quantities of heat, reducing them accelerates the realization of the 2050 goal.

In contrast, targets established in this Leak Abatement OIR, or sector-specific targets established within the SLCP, should establish what is cost effective and technically feasible for those specific sectors. Therefore, PG&E does not feel that these targets need to be coordinated within the Leak Abatement OIR. Instead, as stated in Response 1, we should establish a

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<sup>10</sup> Pacific Gas and Electric Company's Comments on Administrative Law Judge's Ruling Entering Summary of Best Practices Working Group Activities and Staff Recommendations Into the Record and Seeking Comments at 3-5.



technically feasible and cost effective target for the natural gas sector. This can then be included in the portfolio of measures the State is pursuing to meet its economy-wide targets.

**4. How should emission levels, if any are set, interact with the utilities' natural gas safety plans and other gas pipeline work?**

Consistent with SB 1371, any emission level targets that are set in this proceeding should not reduce or deprioritize the safety-related work outlined in operators' gas safety plans developed pursuant to Public Utilities Code Section 961. The scope of work identified within the gas safety plan and other work activities are developed based on PG&E's risk-based model. However, PG&E supports efforts to identify overlap between safety-related work and emission reduction efforts so that efficiencies may be realized. PG&E believes that integrating emission-related activities into this work prioritization will require additional analysis and development. PG&E looks forward to working with stakeholders, the CPUC, and ARB to further refine this process. Until this new focus and scope of work can be planned effectively, all emission-related work should be considered separately in order to ensure that safety-related work is not compromised.

**5. How might technology-specific or work practice requirements interact with a target reduction amount?**

Establishing a target provides a benchmark to evaluate the progress of each utility's operator-specific, flexible Compliance Plan. Flexibility provides operators an incentive to look for innovative methods and new technologies to reduce methane emissions as cost-effectively as possible and achieve any established targets. The Compliance Plans would be reviewed and approved annually by the Commission and ARB. In this manner, the best practices adopted by an operator, cost-effectiveness and the operator's progress toward achieving emission reduction targets are evaluated holistically. Additionally, the Compliance Plan would provide an outline of how the best practices would be implemented, and ensure that any work practices, training, procedures, and processes are updated or modified to provide guidance for these best practices.

**6. Explain your parties' position on establishing targets given the following concerns raised at the workshop:**

- a. How can targets be set when accurate and comparable emissions measurements are still in progress? Should the target-setting process wait until the June 2016 data reports (2015 inventories) have been vetted by CARB and the Commission anticipated late 2016?**

PG&E agrees that it is currently difficult to establish meaningful targets while emissions data from the 2015 baseline year is still under evaluation by the Commission and ARB. PG&E recommends that the target-setting process wait at least until this evaluation is complete and address the issues highlighted in PG&E's response to Question 1, such as accounting for historical emissions reduction work. Additionally, before implementing any target requirements and consistent with SB 1371, the Commission must ensure a cost recovery mechanism is in place and funding is available before mandating the implementation of best practices or approving best practices in an operator's Compliance Plan.<sup>11</sup>

- b. Which functional component (i.e. emission source/equipment type) can utilize direct measurements of leaks and emissions for establishing targets?**

PG&E recommends that operators include direct measurement data as part of their annual emissions reporting and Compliance Plans, and as part of evaluating an operator's progress toward achieving its emissions reduction target, but recommends against establishing "sub-targets" for those components that have direct measurement data available.

In general, direct measurements are more costly than other methods such as engineering calculations and emission factor based assessments. On the other hand, they may provide more specific results to enable more effective abatement measures. For these reasons, direct measurements must be applied to components or groups of components and processes that are

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<sup>11</sup> See Pacific Gas and Electric Company's Comments on Administrative Law Judge's Ruling Entering Summary of Best Practices Working Group Activities and Staff Recommendations into the Record and Seeking Comments at 6-7.

good candidates for large methane abatements. PG&E recommends initially focusing on large emitters such as gas transmission compressors, vents and blow-down stacks. Direct measurements must also use technologies and procedures that are well validated. R&D efforts such as current projects at NYSEARCH,<sup>12</sup> PRCI,<sup>13</sup> and OTD,<sup>14</sup> as well as with Picarro and Stanford,<sup>15</sup> will be dedicated to progressively expanding the application of direct measurements.

**c. Should interim targets be developed, as Environmental Defense Fund (EDF) suggests, based on the information gained in the reports from June 2016?**

Once a long-term target is established, ARB, the Commission and stakeholders will be able to compare reductions against the average annual reductions necessary to achieve the target. The Compliance Plan process provides an opportunity for operators to show their incremental work—either meeting, beating or falling short of the average annual reductions necessary to achieve the target—and allows ARB, the Commission and stakeholders to re-evaluate the longer-term target. As PG&E recommended in its April 12, 2016 presentation at the Targets, Compliance and Enforcement Workshop: “A **phased-in approach** will recognize that these investments don’t happen overnight, provide opportunities to review targets and compliance over time to determine areas of improvement, and flexibility to adapt as new legislation approaches.”<sup>16</sup> This target should be set for 2020 or 2030 or both to align with state policy.

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<sup>12</sup> NYSEARCH project M2014-004 “Technology Evaluation and Tests Program for Quantifying Methane Emissions Related to Non-Hazardous Leaks.”

<sup>13</sup> PRCI project US-4-2 (2016) “Review and Demonstration of Methane Emission Quantification Techniques for Storage Facilities.”

<sup>14</sup> OTD project 7.16.a “Leak Repair Prioritization.”

<sup>15</sup> Stanford student project (2016), “Evaluating the feasibility of using a mobile leak detection system to detect methane super emitters.”

<sup>16</sup> See PG&E presentation at April 12, 2016 Workshop, Slide 6 (emphasis in original).

- d. **Before targets are established, to what extent should cost effectiveness and affordability (including consideration of rate impacts) methodologies and criteria be developed and implemented? What approaches should be used to account for the fact that technologies, tools, and information will improve over time, potentially quickly over the next few years? What options are there to ensure rate impacts are affordable, while achieving significant emissions reductions?**

PG&E presented during the April 12, 2016 Workshop its conclusion (Slide 8) regarding Targets, Compliance and Enforcement as follows:

- Support phased-in approach
- Believe proceedings and measures should be looked at holistically
- Measures should be reviewed prior to determining enforcement
- Ensure flexibility to review and update targets if needed
- Cost-Effective measures with recovery mechanisms are key

PG&E believes that ensuring flexibility when establishing targets will also allow for an opportunity to consider potential rate impacts and affordability in accordance with SB 1371. Consistent with PG&E's proposal for a flexible best practices Compliance Plan, the flexibility in establishing targets is needed in order to determine that if a set target is not likely to be achieved through a cost-effective measure, the Operator (subject to Commission approval) should have the ability to modify the Compliance Plan in order to ensure that affordability is considered.

7. **Explain your opinion on the individual emission reduction projections illustrated on CARB's "An Example of Compliance Plan" on Slide 19. Are they realistic? Why or why not?**

Please see PG&E's discussion of ARB's Slide 19, "An Example of Compliance Plan," in response to Question No. 2.

**8. How should the Commission structure incentives for reductions beyond a target level?**

PG&E believes it is premature at this time to consider the details of an incentive program for reductions beyond a target level. While an incentive program could result in achieving reductions beyond a target level, essential information is needed in order to design a meaningful program structure. Such information would include but not be limited to:

- Will the Commission adopt a one-size-fits-all Compliance Plan or a flexible Compliance Plan that is unique to each operator's conditions?
- What Best Practices will be adopted by the Commission?
- How the Commission will determine the cost-effectiveness question?
- How and when will operators begin to recover the costs of the Best Practices and measures to reduce emissions?

**9. What enforcement models might most effectively ensure reductions are achieved and maintained? Should the Commission revise GO 112-F to include a compliance and enforcement model to address SB 1371 requirements? Or should it establish a new general order specific to meeting SB 1371 requirements similar to the Commission's existing GO 167, Enforcement of Maintenance and Operation Standards for Electric Generating Facilities? What role, if any, should ARB or local air districts, or other entities, play in helping to ensure reductions are achieved and maintained?**

PG&E recommends that the Commission adopt an enforcement model in this proceeding that focuses on an operator's annual Compliance Plan and the approval of that Plan by the Commission and CARB, as proposed by PG&E in its Best Practices comments. As PG&E commented: "Requiring an annual Compliance Plan, subject to approval by the Commission and CARB, places the responsibility on operators to demonstrate how they will drive methane emission reductions, why certain BP measures were selected and how they are cost-effective, and how the BP measures tie into existing work to take advantage of synergies with

safety-related work.”<sup>17</sup> PG&E further stated: “...If an operator’s Compliance Plan is deemed insufficient to achieve expected results, the Commission and CARB would retain the authority to require an operator to include additional measures in its Plan as part of the approval process.”<sup>18</sup>

In this enforcement model, the enforcement mechanism would be included as part of the Commission’s decision in this proceeding requiring operators to submit annual Compliance Plans, as well as requiring operators to report back the following year on the actions taken and emissions reduction results achieved against its target.

General Order 112-F<sup>19</sup> is focused on requirements to ensure pipeline safety and for this reason it does not appear to be an appropriate mechanism to implement a compliance and enforcement model to address SB 1371’s methane emission reduction requirements.<sup>20</sup> Although PG&E recommends that the Commission adopt an enforcement model that focuses on an operator’s Compliance Plan, as outlined above, it does not object to creating a new General Order focusing on the SB 1371 requirements.

Regarding the role that ARB, local air districts or other entities should play in helping to ensure reductions are achieved and maintained, PG&E believes that ARB and the air districts bring crucial scientific and technical expertise to this proceeding, as well as for the development and implementation of utility Compliance Plans. Once the process and requirements for Compliance Plans have been developed, the role of all agencies and stakeholders should be evaluated.

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<sup>17</sup> Pacific Gas and Electric Company’s Comments on Administrative Law Judge’s Ruling Entering Summary of Best Practices Working Group Activities and Staff Recommendations Into the Record and Seeking Comments at 4 (emphasis added).

<sup>18</sup> *Id.* at 5.

<sup>19</sup> State of California Rules Governing Design, Construction, Testing, Operation, and Maintenance of Gas Gathering, Transmission, and Distribution Piping Systems.

<sup>20</sup> SB 1371, Section 1(a), states: “The Legislature has established that safety of the natural gas pipeline infrastructure in California is a priority for the Public Utilities Commission and gas corporations, and nothing in this article shall compromise or deprioritize safety as a top consideration.”

### III. CONCLUSION

PG&E appreciates the opportunity to provide these comments on the Ruling and Staff Workshop Summary.

Respectfully Submitted,

LISE H. JORDAN  
JONATHAN D. PENDLETON

By: \_\_\_\_\_/s/\_\_\_\_\_  
JONATHAN D. PENDLETON

PACIFIC GAS AND ELECTRIC COMPANY  
Law Department  
77 Beale Street, B30A  
San Francisco, CA 94105  
Telephone: (415) 973-2916  
Facsimile: (415) 973-5520  
E-Mail: [Jonathan.Pendleton@pge.com](mailto:Jonathan.Pendleton@pge.com)

Dated: July 15, 2016

Attorneys for  
PACIFIC GAS AND ELECTRIC COMPANY